GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:4552
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India as Global Scientific Power
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Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Government has set any goal to position India among the top five global scientific powers by 2020 and if so, the details thereof;

(b) whether the Government motivates the scientists to take up significant innovations at the global standards and if so, the details thereof along with budget allocated for this purpose;

(c) whether the Government has also prepared technology vision 2035;

(d) if so, the details thereof along with the aims and objectives thereto; and

(e) the steps taken/being taken by the Government to encourage the scientists to achieve the vision?

Answer

MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES
(SHRI.Y. S. CHOWDARY)

(a) No Madam, while Government has not set any specific target to position the country among the top five global scientific powers by 2020. However, the Government had announced the Science, Technology and Innovation (STI) Policy-2013 in which ""positioning India among the top five global scientific powers by 2020"" is indicated as an aspiration. Accordingly, the STI Policy seeks to: (i) Enhance India"s global share of scientific publications from the present 3.6% to 7.0 %; (ii) Establish world class infrastructure for R&D in some select areas; (iii) Make careers in science, research and innovation attractive enough for talented and bright minds; (iv) Create an environment for enhanced private sector participation in R&D, technology and innovation; (v) Seed S&T based high risk Innovation; (vi) Participate in international R&D projects that are high cost and high science.

(b) The Government motivates everyone including scientists to take up significant innovations at Global Standards. The Government is continuously encouraging the Indian scientific community to bring out path breaking innovations having global social and market impact. Department of Science and Technology (DST) has recently launched a programme, NIDHI (National Initiative for Developing & Harnessing Innovation) where in number of schemes like, Technology Business Incubators, Centre of Excellence, Seed Support system etc are implemented to support innovation. A total budget of Rs. 180 crores has been earmarked for FY 2016-2017 for these programmes. National Innovation Foundation Ahmedabad (NIF), an Autonomous Institute of DST, also provides support for scouting, spawning, sustaining and scaling-up grassroot level innovations across the country.

(c) Yes Madam, Technology Information, Forecasting and Assessment Council (TIFAC), an autonomous body of Department of Science and Technology, has prepared 'Technology Vision 2035' document which was released by Hon'ble Prime Minister, on 3rd January 2016 during 103rd session of Indian Science Congress, held at Mysore University, Mysuru.

(d) Technology Vision 2035 document presents a range of technologies to address the prerogatives that Indians must enjoy as citizen of a developed country by 2035. These technologies are placed on a timeline of four stages namely- Ready for deployment; lab to field; requiring targeted research; and technology in imagination, providing a lead for stakeholders to carry on the baton forward. For realization of envisioned scenario, the document has identified 10 grand challenges that our country should confront to make wide-scale impact across the sectors, as we move towards 2035. The transversal technologies like Materials, Manufacturing and Information & Communication Technology (ICT) that provide the sub-stratum and cut across all the other technologies have also been focused.

(e) To achieve the objectives of the Technology Vision 2035 document and encourage the scientists, drawing of technology roadmaps of 12 sectors has been undertaken in parallel. The roadmap for each sector would provide future technology trends, demand projections, R&D directives, pointers for research, anticipated challenges and policy imperatives etc. 4 sectoral technology roadmaps on Materials; Manufacturing; Medical Science and Health Care; and Information & Communication Technology have already been released.

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